

ACCESSION NR: AP4011720

where k_1, \dots, k_n - arbitrary complex numbers. A detailed solution is given for $n = 3$ both in a repulsing and an attracting field. The ψ -functions of the scattering theory are found, satisfying the Lippmann-Schwinger equations, and their completeness (both in coordinate and momentum space) is proved. The scattering operator is constructed in terms of the ψ -functions

$$S(b|a) = \int d^3x \psi_{out}(x|b) \psi_{in}(x|a).$$

and its eigenfunctions and eigenvalues, in particular for symmetric function subspace with elastic scattering, are found. "The authors express their gratitude to the members of the I. Ye. Tamm seminar in FIAN in October 1962." Orig. art. has: 29 equations.

ASSOCIATION: Moskovskiy universitet, Kafedra teorii funktsiy i funktsional'nogo analiza (Moscow University, Department of Theory of Functions and Functional Analysis)

SUBMITTED: 07Feb63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH

NO REF SOV: 003

OTHER: 003

Card 2/2

BEREZIN, F.A.

Track formula for Schrodinger's many-particle equation.
Dokl. AN SSSR 157 no.5:1069-1072 Ag '64. (MIRA 17:9)

1. Moskovskiy gosudarstvennyy universitet. Predstavleno
akademikom I.G. Petrovskim.

L 1586-66 EWT(1) IJP(c) GG

AM5014980

BOOK EXPLOITATION

UR/
519.9

41,55
Berezin, Feliks Aleksandrovich 44,65

Method of second quantization (Metod vtorichnogo kvantovaniya).
Moscow, Izd-vo "Nauka", 1965, 235 p. illus., biblio. 8000 copies
printed. Series note: Sovremennyye problemy matematiki

TOPIC TAGS: second quantization, quantum mechanics, Thirring model,
quantum field theory

PURPOSE AND COVERAGE: The method of second quantization, which is
used in problems of quantum mechanics in cases when there is a
variable number of particles, is discussed in detail. This method
utilizes a natural realization of a state space as a space of func-
tionals of a certain number of variables. In particular, this
sort of approach makes it possible to treat problems of second
quantization as problems of quantum mechanics with an infinite
number of degrees of freedom. The author establishes the state
spaces and the simplest operators over these spaces, he establishes
the connection between vectors and functionals, between operators

Card 1/3

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AM5014980

and functionals, and the basic rules for operations on functionals. The book is intended for scientific workers, graduate students, and mathematics and physics students.

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SUB CODE: ME, MA SUBMITTED: 25Jan65 NO REF SOV: 022

OTHER: 029

Card

3/3

LOO816-66 EWT(d) IJP(c)

ACCESSION NR: AP5020819

UR/0020/65/163/004/0795/0798

AUTHOR: Berezin, F. A.

TITLE: Asymptotics of the eigenfunctions of the multi-particle Schrodinger equation

SOURCE: AN SSSR. Doklady, v. 163, no. 4, 1965, 795-798

TOPIC TAGS: differential equation, Schrodinger equation, eigenfunction

ABSTRACT: The author considers

$$\left\{ -\left(\frac{\partial^2}{\partial x_1^2} + \dots + \frac{\partial^2}{\partial x_n^2} \right) + \sum_{i < j} v(x_i - x_j) \right\} \psi = \lambda^2 \psi, \quad (1)$$

subject to the condition

$$v(x) = \int_{\mu_0}^{\infty} e^{-\mu |x|} \xi(\mu) d\mu, \quad \int_{\mu_0}^{\infty} |\xi(\mu)| d\mu < \infty, \quad \mu_0 > 0, \quad (2)$$

where $v(x)$ is the potential. He shows the existence of symmetric and antisymmetric solutions and proves a completeness theorem for summable square symmetric and antisymmetric solutions. He finds asymptotics of these symmetric and antisymmetric solutions. Orig. art. has: 17 formulas.

Card 1/2

100816-66

ACCESSION NR: AP5020819

ASSOCIATION: none

SUBMITTED: 06Jan65

ENCL: 00

SUB CODE: MA

NO REF SOV: 004

OTHER: 000

ml
Card 2/2

BEREZIN, F.B.

State of vegetative nervous system in an unusual form of vestibular encephalitis. Izv. AN Kazakh. SSR. Ser. med. i fiziol. no.2:101-108 '61. (MIRA 15:4)

1. Iz Ust'-kamenogorskogo otdeleniya (zav. - M.K.Kayrakbayev) Instituta krayevoy patologii AN Kazakhskoy SSR (direktor - B.A. Atchabarov).

(ENCEPHALITIS) (VESTIBULAR APPARATUS--DISEASES)
(NERVOUS SYSTEM, AUTONOMIC)

BEREZIN, F.B.

Use of hypoglycemic sulfamides in treating schizophrenia resistant to insulin. Zhur. nevr. i psikh. 62 no.4:598-600 '62. (MIRA 15:5)

1. Leninogorskiy psikhonevrologicheskiy dispanser (glavnyy vrach F.B.Berezin).

(SCHIZOPHRENIA) (SULFAMIDE)
(INSULIN SHOCK THERAPY)

BEREZIN, F.B.

Study of the sequelae of the vestibular form of encephalitis.
Zhur. nevr. i psikh. 62 no.3:356-360 '62. (MIRA 15:3)

1. Leningorskiy psikhonevrologicheskiy dispanser (glavnyy
vrach D.M. Vil'vovskaya).

(ENCEPHALITIS)
(VESTIBULAR APPARATUS—DISEASES)

KOROVALOV, Nikolay Vasil'yevich; BEREZIN, F.B., red.

[Subacute anterior poliomyelitis] Podostryi perednii polio-
mielit. Moskva, Izd-vo "Meditsina," 1964. 95 p.
(MIRA 17:7)

GELLERSHTEYN, S.G.; TSFASMAN, I.L.; HEREZIN, F.B., red.

[Principles and methods of occupational therapy for mental patients] Printsipy i metody trudovoi terapii psikhicheski bol'nykh. Moskva, Meditsina, 1964. 163 p.
(MIRA 17:5)

BANSHCHIKOV, V.M.; NEVZOROVA, T.A.; BEREZIN, P.B.

Dynamics and pathogenesis of the psychopathological symptomatology of diencephalic lesions. Zhur. nevr. i psikh. 64 no.10:1521-1527 '64.

(MIRA 17:11)

1. Kafedra psikhiiatrii (zaveduyushchiy - prof. V.M. Bانشchikov)
I Moskovskogo ordena Lenina meditsinskogo instituta im. Sechenova.

ZHISLIN, Samuil Grigor'yevich; BEREZIN, F.B., red.

[Studies on clinical psychiatry; clinical pathogenetic relations] Ocherki klinicheskoi psikhiiatrii; kliniko-patogeneticheskie zavisimosti. Moskva, Meditsina, 1965. 319 p.
(MIRA 18:6)

GLAZOV, Vladimir Aleksandrovich; BEREZIN, F.B., red.

[Schizophrenia; clinical experimental studies] Shizofrenia; kliniko-eksperimental'noe issledovanie. Moskva, Meditsina, 1965. 227 p. (MIRA 18,10)

L 1025-46 FWT(1) RO

ACC NRI AR6022383 (N) SOURCE CODE: UR/0397/65/000/024/0023/0023

AUTHOR: Berezin, F. B. 22

TITLE: Some data on the use of indopan⁶ in treating schizophrenia 3

SOURCE: Ref. zh. Farmakologiya. Toksikologiya, Abs. 24.54.180

REF SOURCE: Sb. Vopr. klinich. nevrol. i psikhatrii. T. 4. Tartu, 1965, 52-55

TOPIC TAGS: pharmacology, nervous system drug, drug effect, psychopathology

ABSTRACT: 32 schizophrenic patients with case histories of 2 to 11 yrs were treated with indopan (methyl tryptamine hydrochloride) in individually selected doses (5 to 80 mg). Treatment lasted 1 to 3 mos. Effect was noted from the first month. Better results were attained when schizophrenia was accompanied by a depressive state with reduced psychic activity and secondary catatonic stupor. The effect of indopan was increased when used in combination with tranquilizers. K. D.
/Translation of abstract/.

SUB CODE: 06

Card 1/1 MT UDC: 615.7

ACC NR: AP6033917

SOURCE CODE: UR/0246/66/066/010/1561/1565

AUTHOR: Banshchikov, V. M. (Head; Professor); Berezin, F. B.

ORG: Department of Psychiatry (Head-Prof. V. M. Banshchikov) First Moscow Medical Institute (Kafedra psikhiiatrii Pervogo moskovskogo meditsinskogo instituta)

TITLE: The action mechanism of psychotropic substances (the fast and slow component of the psychopharmacological effect)

SOURCE: Zhurnal nevropatologii i psikhiiatrii, v. 66, no. 10, 1966, 1561-1565

TOPIC TAGS: psychiatry, psychotherapy, psychophysiology, drug treatment, gamma amino butyric acid, ~~chlorpromazine~~, reserpine, levomepromazine, mazheptil, *CHLORPROMAZINE, TRANQUILIZER, PSYCHOLOGY, DRUG EFFECT*

ABSTRACT: The effects of fast-acting, predominately tranquilizing neuroleptic drugs, of which levomepromazine is an example, and of slower-acting, basically antipsychotic drugs, typified by "mazheptil," are discussed and compared. The authors studied the relationship between the tranquilizing and antipsychotic effects of gamma-aminobutyric acid (GABA)-derivative drugs, using two compounds (β -phenyl- γ -aminobutyric acid and sodium hydroxybutyrate) which penetrate the blood-brain

Card 1/2

UDC: 615.786-036

ACC NR: AP6033917

barrier more readily than GABA. The therapeutic uses, and primary and secondary effects of these classes of drugs are discussed. The combined use of tranquilizers (which act immediately) and antipsychotic drugs (which may have a latent period of days, weeks, or months) may enhance the therapeutic effectiveness of both, though they have been shown to act relatively independently. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 06Jan66/ ORIG REF: 006/ OTH REF: 007

Card 2/2

BEREZIN, P.I.

Storing fuel gas in the leaching chambers of hydro-cut wells.

Neft. i gaz. prom. no.3:59-60 JI-S '64.

(MIRA 17:12)

9.7800

ll093
S/185/62/007/011/005/019
D234/D308

AUTHORS: Berezin, F.N., Ofenhenden, R.H., Rozental', O.M.
~~and Shaleiko, M.A.~~

TITLE: The small amplitude analyzer AIMA-3 (AIMA-3)

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 11, 1962,
1180-1190

TEXT: This analyzer was designed in order to improve the reliability and some characteristics of AIMA-2. The channel generator circuit is completely changed. Instead of frequency dividers an artificial delay line is used, the delay being 30 or 48 μ sec. In the memory unit, two recording heads are used, the distance of one from the playback head being 1.5 times greater than that of the other. This increases the number of channels to 120. In the supply unit, kenotrons are replaced by silicon diodes, which decreases the number of transformers and choke coils. The number of vacuum tubes has been reduced from 128 to 84. The number of channels is 50 (with channel capacity of 65535 pulses), 80 or 120 (1023 pulses).

Card 1/2

The small amplitude ...

S/185/62/007/011/005/019
D234/D308

Background subtraction is possible with a factor 1, 2 and 4. The analyzer consists of a measuring unit and a supply unit, each 300 x 450 x 500 mm. There are 13 figures. X

ASSOCIATION: Instytut fizyki AN URSR, Kyiv (Institute of Physics of the AS UkrSSR, Kiev)

SUBMITTED: June 8, 1962

Card 2/2

BEKEZIN, F.N.; OFENHENDEN, R.G. [Ofenhenden, R.H.]; ROZENTAL', O.M.;
SHALEYKO, M.A.

Small-size pulse-height analyzer AIMA-3. Ukr.fiz.zhur. 7 no.11:
1180-1190 N '62. (MIRA 15:12)

1. Institut fiziki AN UkrSSR, Kiyev.
(Electronic differential analyzer)

MAL'NEV, A.F.; KREMENCHUGSKIY, L.S.; BEREZKO, B.N.; SHEVTSOV, L.N.;
BOGDEVICH, A.G.; KIRILLOV, G.M.; CHASHECHNIKOVA, I.T.;
YARMOLENKO, N.A.; OFENGENDEN, R.G.; SERMAN, V.Z.;
DALYUK, Yu.A.; BEREZIN, F.N.; KONENKO, L.D.; SHALEYKO, M.A.;
SHEVCHENKO, Yu.S.; STOLYAROV, V.A.; KIRILLOV, G.M.; BOGDEVICH, S.F.;
LYSENKO, V.T.; BRASHKIN, N.A.; SKRIPNIK, Yu.A.; GRESHCHENKO, Ye.V.;
TUZ, R.M.; SERPILIN, K.L.; GAPCHENKO, L.M.

Abstracts of completed research works. Avtom. 1 prih. no.3:90-91
Jl-S '62. (MIRA 16:2)

1. Institut fiziki AN UkrSSR (for all except Skripnik,
Greshchenko, Tuz, Serpilin, Gapchenko). 2. Kiyevskiy
politekhnicheskij institut (for Skripnik, Greshchenko, Tuz,
Serpilin, Gapchenko).

(Research)

EXPERIMENTAL MEDICA Sec 7 Vol 13/8 Pediatrics Aug. 59

1995. SOME DATA ON THE ADMINISTRATION OF ACTH IN THE TREATMENT OF CHOREA MINOR (Russian text) - Berezin F. V. - ZDRAVOOKHR. KAZAKHST. 1958, 18/1 (53-55)

ACTH was given to 10 chorea patients. Treatment consisted of a total of 1,000-1,500 U. in decreasing doses beginning with 120 U. per 24 hr. Treatment involved, on the average, 18 to 32 days.

Herman - Łódź (VIII. 7)

BEREZIN, F.V.

Some data on the use of ACTH in treating chorea minor. Zdrav. Kazakh.
18 no.1:53-55 '58. (MIRA 13:7)

1. Iz Leninogorskogo psikhonevrologicheskogo dispensera.
(CHOREA) (ACTH)

BEREZIN, F.V.

Periodic psychoses in diabetes insipidus. Vrach. delo no.2:130-
131 F 161. (MIRA 14:3)

1. Leninogorskiy psikhonevrologicheskiy dispanser.
(DIABETES) (MENTAL ILLNESS)

~~BEREZIN, F.V.~~, inzh. (g.Leningrad); ~~GONIMBERG, I.V.~~, kand.tekhn.nauk
(g.Leningrad); GEL'VIT, Ya.K., inzh. (g.Leningrad); MAZURSKIY,
E.M., inzh. (g.Leningrad); ~~TEB-MIKAELYANTS, G.S.~~, inzh. (g.Leningrad)

Useful work on the fundamentals of railroad design ("Fundamentals
of designing railroads with electric and diesel traction" by
G.I. Chernomordik, IU.E. Ryvkin. Reviewed by F.V. Berezin and
others). Zhel.dor.transp. 43 no.6:95-96 Je '61. (MIRA 14:7)
(Railroad engineering) (Chernomordik, G.I.)
(Ryvkin, IU.E.)

BEREZIN, G.A.; ZENCHENKO, V.P.

Pneumatic positioner. Mashinostroitel' no.8:26 Ag '61.

(MIRA 14:7)

(Pneumatic control)

L 10284-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) FDM/GD
 ACC NR: AT6031185 (A) SOURCE CODE: UR/ 0000/66/000/000/0234/0241

AUTHOR: Berezin, G. A.; Zenchenko, V. P. 34

ORG: None

TITLE: Synthesis of pneumatic systems of sequential automatic machines in the presence of input signals 14

SOURCE: Teoriya mashin-avtomatov i pnevmo-gidroprivodov (Theory of automatic machinery and pneumatic and hydraulic drives); sbornik statey. Moscow, Izd-vo Mashinostroyeniye, 1966, 234-241

TOPIC TAGS: automatic pneumatic control, sequence, cyclic coding

ABSTRACT: The authors consider operation of a self-contained automatic machine assuming that operation may be described by cyclic continuous repetition of a given word in some alphabet q . If q_i designates the internal state of the machine in the i -th cycle, the operation of the system is defined by the relationship

$$q_i = F(q_{i-1}),$$

so that given operating conditions may be realized only if each state q_{i-1} uniquely

Card 1/2

ACC NR: AT6031185

determines the state q_i . A sequence which permits transition from one state to two or more different states is called *contradictory* while the conditions determining this sequence are called *unrealizable*. The procedure required for converting unrealizable conditions into realizable conditions is discussed and synthesis of a control system is analyzed for various types of external signals. Orig. art. has: 4 figures, 3 formulas.

SUB CODE: 13/ SUBM DATE: 12Jan66/ ORIG REF: 002

Card 2/2 ⁶⁷

69-20-3-7/24

AUTHORS: Avgul', N.N.; Berezin, G.I., Kiselev, A.V.; Korolev, A.Ya.

TITLE: The Heat of Adsorption of Hydrocarbons on Carbon Blacks of Different Degrees of Graphitization (Teplota adsorbtsii ug-levodorodov na sazhakh s razlichnoy stepen'yu grafitirovaniya)

PERIODICAL: Kolloidnyy zhurnal, 1958, vol XX, Nr 3, pp 298-304 (USSR)

ABSTRACT: In the article the adsorption isotherms and the differential heats of adsorption of 3-methylhexan and benzene on the black sferon-6, graphitized at 2,800°C, were studied. In Graph 1, the absolute adsorption isotherms of the two vapors on black sferon-6 heated to 1,700 and 2,800°C are represented. Both coincide, i.e. the temperature has no influence on the adsorption properties of blacks. The heats of adsorption of hydrocarbons on carbon black graphitized at 2,800°C are close to the theoretical values for the potential of adsorption forces calculated previously.

Card 1/2 There are 4 graphs, 3 tables, and 17 references, 13 of which are Soviet and 4 English.

69-20-3-7/24

The Heat of Adsorption of Hydrocarbons on Carbon Blacks of Different Degrees of Graphitization

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry of the USSR Academy of Sciences). Laboratoriya sorbtzionnykh protsessov (Laboratory of Sorption Processes)

SUBMITTED: March 15, 1958

Card 2/2

1. Hydrocarbons—Heat of absorption 2. Carbon black—Applications

-5 (4)

AUTHORS:

Avgul', N. N., Berezin, G. I.,
Kiselev, A. V., Lygina, I. A.

SOV/62-59-5-5/40

TITLE:

Adsorption Heat of a Number of Isoalkanes, Naphthenes and of Toluene on Graphitized Carbon Black (Teplota adsorptsii ryada izoalkanov, naftenov i toluola na grafitirovannoy sazhe)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 787 - 796 (USSR)

ABSTRACT:

In this work the following hydrocarbons were investigated as to their adsorption heat: three isoalkanes (neohexane, isooheptane, and isooctane), two alicyclic hydrocarbons; cyclopentane and methylcyclopentane, and the alkylaromatic compound toluene. The hydrocarbons had been selected in this way in order to investigate the effect of the chain branching, the ring formation of these chains, and the introduction of aliphatic substituents into the naphthene and benzene ring on adsorption. The hydrocarbons used in the investigations had been synthesized at the Institut organicheskoy khimii AN SSSR (Institute of Organic Chemistry of the AS, USSR) by Ye. A. Mikhaylova, A. F. Plate, A. L. Liberman, and S. V. Zotova. The authors express their gratitude for their help. The constants of these substances are summarized.

Card 1/3

Adsorption Heat of a Number of Isoalkanes, Naphthenes SOV/62-59-5-5/40
and of Toluene on Graphitized Carbon Black

ed in table 1. "Sferon"-6 was used as adsorbent; it was graphitized at 1700°. The differential adsorption heat was determined at 20° in a calorimeter with constant heat exchange; the amount of the adsorption was determined by means of a capillary vacuum liquid microburet. Figures 1, 2 show the isothermal lines of adsorption of the various substances and figures 3, 4 show the dependence of the differential adsorption heat on the amount of heat adsorbed by the individual substances. The figures show that the normal adsorption heat of isoalkanes and naphthenes is lower than that of the corresponding n-alkanes. The value of the adsorption heat of cyclopentane amounts to only half of that of n-pentane. Cyclopentane, therefore, shows greater attraction towards the adsorption layer, its isothermal line of adsorption is concave at its beginning. It can be seen from the thermodynamic evaluation of the experimental data obtained that the isothermal line of adsorption of cyclopentane cannot be represented by the Langmuir equation or BET equation but by an equation which allows for the interaction adsorbate-adsorbate

Card 2/3

Adsorption Heat of a Number of Isoalkanes, Naphthenes and of Toluene on Graphitized Carbon Black SOV/62-59-5-5/40

(Fig 5). The entropy curves (Fig 6) indicate that the state of isoalkanes and naphthenes in the dense adsorption layer on graphite is much closer to the liquid state than that of n-alkanes. The methyl group in the toluene molecule reduces its mobility with respect to the unsubstituted benzene and the other purely cyclic compounds. With regard to the theoretical calculation of adsorption heat it was assumed that, in the case of the ramified hydrocarbons, the adsorption heat is an additive function of the number of carbon atoms in the molecule. The free adsorption energy and the surface of the adsorbent occupied by molecules were determined according to the same assumption. There are 6 figures, 3 tables, and 17 references, 12 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: July 25, 1957

Card 3/3

5(4)

AUTHOR:

Berezin, G. I.

SOV/62-59-6-36/36

TITLE:

Letters to the Editor (Pis'ma redaktoru)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 6, p 1143 (USSR)

ABSTRACT:

In this letter to the editor the author describes a simple but nevertheless accurate relative method developed by him for measuring the heat capacity. It is based upon the compensation of the heating velocities of the bodies with the known capacity and the one to be determined, C_2 , C_1 , respectively. The heating velocity is the same. When equilibrium is attained

$\frac{w_1}{C_1} = \frac{w_2}{C_2}$ (1) holds, where w_1 and w_2 denote the heating power.

Instead of the heating power also the resistances R_1 , R_2 of the heating coils connected either in series or parallel under introduction of an additional resistance R_3 for the compensation of the heating velocity may be inserted in the above mentioned

Card 1/2

Letters to the Editor

SOV/62-59-6-36/36

equation: $\frac{C_1}{R_1} = \frac{C_2}{R_2} \left(1 + \frac{R_1}{R_3}\right)^2$ (2). By checking the method it was shown that the accuracy of the determinations (the ratio C/R) does not depend on the thermal conductivity of the system, the current intensity, and the amount of the current deviated by the resistance R_3 . The measuring error of the heat capacity according to this method did not exceed 0.01%. There are 2 references, 1 of which is Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: April 6, 1959

Card 2/2

8(2)

SOV/32-25-4-45/71

AUTHOR:

Berezin, G. I.

TITLE:

Simple and Highly Sensitive Battery of Thermoelements for Measuring the Temperature of the Surface of Bodies (Prostaya i vysokochuvstvitel'naya batareya termopar dlya izmereniya temperatury poverkhnosti tel)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, pp 484-485 (USSR)

ABSTRACT:

To control the temperature of the envelope of adiabatic calorimeters, the temperature difference between the calorimeter surface and the envelope must be measured. This can be done by means of a differential battery of thermoelements. The manufacture of such a battery has already been described (Ref 1), and is described in the present case in a slightly modified form. The thermal battery consists of 1000 copper-constantan elements and has a sensitivity of about $4 \cdot 10^{-2}$ v/degree which permits the galvanometer M 21/1 to be used and makes possible the measurement of a temperature difference of $\pm 2 \cdot 10^{-6}$ degrees. The thermal battery for measuring the surface temperature represents, in principle (Fig 1), a spiral of constantan wire ($D=0.1$ mm) wound upon a thin-walled cylinder of mica or nitrofilm. To make this

Card 1/2

Simple and Highly Sensitive Battery of Thermoelements for Measuring the
Temperature of the Surface of Bodies

SOV/32-25-4-45/71

thermobattery, the mica cylinder is placed on two metallic half-cylinders, the constantan wire is wound up, and the copper is applied electrolytically (Fig 2). The described battery can also be used in industry to determine the temperature of drying cylinders. A thermal battery consisting of 200 elements of copper-constantan (length of the spiral 100 mm, diameter 30 mm, turn 0.5 mm) has - at a temperature drop of 50° - a thermo emf of about 0.4 v at a current intensity of about 1 ma. There are 2 figures and 1 reference.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

Card 2/2

AVGUL', N.N.; BEREZIN, G.I.; KISELEV, A.V.; LYGINA, I.A.

Adsorption and the heat of adsorption of n-pentane and n-hexane
on barium sulfate. Izv. AN SSSR. Otd. khim. nauk no. 11: 1948-1954
N '60. (MIRA 13:11)

1. Institut fizicheskoy khimii AN SSSR.
(Heat of adsorption) (Pentane) (Hexane) (Barium sulfate)

BEREZIN, G.I.; KISELEV, A.V.; SINITSYN, V.A.

Heat capacity of the adsorption system silica gel - water. Dokl.
AN SSSR 135 no.3:632-641 N '60. (MIRA 13:12)

1. Institut fizicheskoy khimii Akademii nauk SSSR. Predstavleno
akad. V.I. Spitsynym. (Heat capacity) (Silica)

AVGUL', N.N.; BEREZIN, G.I.; KISELEV, A.V.; LYGINA, I.A.

Adsorption and heat of adsorption of normal alcohols on graphitized
carbon black. Izv. AN SSSR. Otd. khim. nauk no.2:205-214 F '61.
(MIRA 14:2)

1. Institut fizicheskoy khimii AN SSSR.

(Adsorption)

(Carbon black)

(Alcohols)

BEREZIN, G.I.; KISELEV, A.V.; SINITSYN, V.A.

Dependence of the average molar heat capacity of an adsorbate
on the differential heat of adsorption. Koll.zhur. 23 no.5:
638-639 S-O '61. (MIRA 14:9)

1. Institut fizicheskoy khimii AN SSSR, Gruppya khimii pover-
khnosti, Moskva.

(Heat of adsorption) (Heat capacity)
(Systems (Chemistry))

BEREZIN, G.I.; KISELEV, A.V.; SERDOBOV, M.V.

Continuously heated adiabatic differential calorimeter with continuous adsorbate feed for measuring the heat of adsorption on small solid surfaces. Zhur. fiz. khim. 36 no.9:2091-2095 S '62.
(MIRA 17:6)

1. Institut fizicheskoy khimii AN SSSR.

BEREZIN, G.I.; KISELEV, A.V.; SINITSYN, V.A.

Heat capacity of the adsorption systems silica gel - water - benzene -
n - hexane. Zhur.fiz.khim. 37 no.2:325-332 F '63. (MIRA 16:5)

1. Institut fizicheskoy khimii AN SSSR.
(Silica) (Benzene) (Hexane) (Heat of adsorption)

PEREZIN, G.I. (Moscow); KISELEV, A.V. (Moscow); KOZLOV, A.A. (Moscow)

Calorimeter for measuring heat capacities of disperse bodies and
adsorption systems from 120 to 300°K. Zhur.fiz.khim. 38 no.8:2106-
2110 Ag '64. (MIRA 18:1)

1. Institut fizicheskoy khimii AN SSSR.

TIMOFEYEV, A.P.; BEREZIN, G.N.

Valve for jettisoning gas from the annular space to the pump.

Nefteprom. delo no.8:25-27 '64.

(MIRA 17:12)

1. Neftepromyslovoye upravleniye "Aksakovneft".

ACC NR: AT6004862

SOURCE CODE: UR/2563/65/000/255/0166/0171

AUTHOR: Berezin, G. N.; Zarutskiy, Ye. M.; Lepeshinskaya, V. N.

80
B+1

ORG: none *

TITLE: Effect of cesium-ion bombardment upon the secondary-emission properties of alloy-type magnesium-oxide and beryllium-oxide emitters

SOURCE: * Leningrad. Politekhicheskii institut. Trudy, no. 255, 1965.
Radioelektronika (Radio electronics), 166-171

TOPIC TAGS: secondary emission, photomultiplier, ion bombardment, magnesium oxide, beryllium compound, cesium, electron emission

ABSTRACT: Important for understanding the photomultiplier-fatigue phenomenon, an experimental investigation was organized of the effect of cesium-ion bombardment upon the secondary-electron-emission factor σ of magnesium-oxide and beryllium-oxide films that are formed as a result of activation of CuAlMg and CuAlBe alloys. Experimental curves of $\sigma(E_p)$, $\sigma_{\max} / \sigma_{0 \max}$ vs. E_1 and I_1 for 10-, 30-, and 60-min bombardment in a 10^{-6} -torr vacuum are shown; E_1 is the ion energy and I_1 is the density of the ion beam. The fall-off of the $\sigma_{\max} / \sigma_{0 \max}$ curve depends on the

Card 1/2

ACC NR: AT6004862

number of impinging ions rather than on their energies; this result is in agreement with G. E. I. Moore's data (J. Appl. Phys., 1959, v. 30, no. 7, pp. 1086-1100). Two experimental curves of the ion-electron emission factor $\gamma(E_1)$ and the ion-ion emission factor $K(E_1)$ show that γ increases linearly and K is practically independent of E_1 . Orig. art. has: 5 figures.

SUB CODE: 20, 09 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 003

Card 2/2

BEREZIN, I. (Kirov)

Fans of the Vyatka handi craft workers. From.koop.no.5:31-32 My '56.
(Kirov Province--Handicraft) (MLEA 9:9)

BEREZIN, I.

Toward new milestones. Mest.prom.1 khud.promys. 2 no.8:
7-8 Ag '61. (MIRA 14:9)

1. Predsedatel' proizvodstvenno-massovoy komissii komiteta
profsoyuza Verkhne-Pyshminskogo metallosavoda, Sverdlovskaya
oblast'.

(Sverdlovsk Province--Metal industry--Labor productivity)

BEREZIN, I.A.

10(0); 18(0); 25(0) PHASE I BOOK EXPIRATION SOV/2035

Ufa. Aviatsemy Institute

Trudy, Vp. 2. (Transactions of the Ordzhonikidze Aviation Institute, Ufa). No. 2. Ufa. Bashkirskoye knizhnoye izd-vo, 1956. 219 p. Karta slip inserted. 1,000 copies printed.

Mikrofilm Berezin, I.A. Yezhik (Resp. Ed.), A.M. Rakhmanov, I.A. Polozovskiy, S.I. Bulkev, I.A. Berezin, V.A. Vinogradov, and P.D. Burko. Resp. Ed. for this number: I.A. Polozovskiy; Ed. of Publishing House: M.A. Oul'ich; Tech. Ed.: P.O. Gaydullin. Publishing House: M.A. Oul'ich; Tech. Ed.: P.O. Gaydullin.

REMARKS: This book is intended for engineers of scientific and industrial institutions.

COVERAGE: This collection is composed of a number of unrelated articles in mechanical, aeromechanical (fluid dynamics), metallurgical and other branches of engineering. For further coverage see Table of Contents.

REMARKS: Investigation of the Process of Machining with Vibration Tools. The article gives basic results of an investigation of the process of removal of metal by vibration in steel turning on the machine tool. The results of the investigation are given in 15 references: 11 Soviet, and 4 English.

REMARKS: Methodology for Elabourating Technological Process of Aircraft Engine Assembly. According to the author this is the first attempt to elaborate the technological processes of assembling aircraft engines prior to mass production. Basic principles for development of technological processes of assembly, recommended sequence of operations, and some organizational requirements are given. There are 6 Soviet references.

REMARKS: Graphical Method for the Determination of Volatile and Residue-Producing Properties of Brown Coal. The article describes a method of determining the volatile and residue-producing properties of brown coal. A method for the construction of individual curves, their practical significance, and a method for the composition of tables are given. There are 8 Soviet references.

REMARKS: Qualitative Paper-Chromatographic and Luminescent Method of Marking Bituminous Brown Coals. The article describes methods for investigations of a large number of coals. Results are given in the form of a table. There are 6 Soviet references.

REMARKS: Small Dimension Engine with Emulsion Fuel Injection. This article investigated the possibility of using emulsion injection of fuel in small-dimension engines. Design of a sliding pump and of a slide-valve pump is described. There are 6 Soviet references.

AVAILABLE: Library of Congress

13/67m
8-17-59

SOV/120-59-1-47/50

AUTHORS: Berezin, I. A., Voronkov, M. I.

TITLE: A Device for Loading the Samples into a Vacuum System (Bunker dlya zagruzki obraztsov v vakuumnuyu ustanovku)

PERIODICAL: Priory i tekhnika eksperimenta, 1959, Nr 1, p 152 (USSR)

ABSTRACT: The device described is shown diagrammatically in the figure (see upper half of p 152). The tube 3 contains a polished plug 4 with a helix 2. The tube 3 is inserted into the system in such a way that the open end 1 of the helix is above the crucible of a vacuum furnace. The samples are loaded through the open end of the helical tube in such a way that each turn of the tube contains one sample. The plug is then lubricated with vacuum grease and inserted into the tube. The samples are loaded into the furnace by turning the plug. In this way, the samples are progressively displaced in the helical tube and fall into the oven from the open end of the tube. The paper contains 1 figure.

ASSOCIATION: Fizicheskiy institut AN SSSR (Physics Institute of the Academy of Sciences, USSR)

SUBMITTED: January 22, 1958.

Card 1/1

SOV/120-59-1-48/50

AUTHORS: Berezin, I. A., Voronkov, M. I.

TITLE: A Capillary Tap (Kapillyarnyy kran)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 1, p 152 (USSR)

ABSTRACT: The device is illustrated diagrammatically in the figure (see lower half of p 152). It is in the form of a two-way valve with two apertures in its plug. The aperture 2 is used in the preliminary evacuation of the tube leading to the gas container. The gas is let in through the capillary tube 1, whose diameter can be arbitrarily small. This permits a very accurate regulation of the pressure of the gas which is admitted into the vacuum system. The paper contains 1 figure.

ASSOCIATION: Fizicheskiky institut AN SSSR (Physics Institute of the Academy of Sciences USSR)

SUBMITTED: January 20, 1958.

Card 1/1

S/051/60/008/03/025/038
E201/E191

AUTHORS: Berezin, I.A., and Stepanova, A.I.

TITLE: On the Problem of Sensitization of Photographic Plates in the Ultraviolet Region of the Spectrum

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 3, pp 408-410 (USSR)

ABSTRACT: To increase the sensitivity of photographic plates in the far ultraviolet they are frequently coated with luminescent substances. The authors studied such sensitization of photographic plates of I, II and III spectroscopic types, micro and iso-ortho plates. Transformer oil, vaseline oil and sodium salicylate were used as sensitizers. The results obtained (Figs 1-4) lead the authors to recommend a 20% solution of sodium salicylate in a 50/50% mixture of water and ethyl alcohol for sensitization of type III spectroscopic plates in the region 2000-2300 Å. The plates are immersed in the solution for 3 sec and are dried in an air stream for several minutes. The layer of sodium salicylate should not be washed off before developing. Such sensitized plates do not deteriorate when stored for considerable

Card
1/2

S/051/60/008/03/025/038
E201/E191

On the Problem of Sensitization of Photographic Plates in the
Ultraviolet Region of the Spectrum

Card periods of time.
2/2 There are 4 figures and 7 Soviet references. ✓

SUBMITTED: July 30, 1959

S/075/60/015/004/029/030/XX
B020/B064

AUTHORS: Berezin, I. A. and Aleksandrovich, K. V.

TITLE: Determination of Phosphorus in Beryllium Oxide by the Spectrographic Method

PERIODICAL: Zhurnal analiticheskoy khimii, 1960, Vol. 15, No. 4, pp. 509 - 510

TEXT: The methods of spectrographic control of the purity of beryllium and beryllium oxide are described in Refs. 1 - 3, however, phosphorus has not been determined. Only 0.003% P can be determined when the sample is filled into carbon electrodes. The authors developed a method which makes it possible to determine up to 0.001% P in beryllium oxide without previous concentration. The powdery samples were diluted with coal dust at a ratio of 3:1, put in a colloidal solution in ethyl alcohol, and applied to the lateral surfaces of graphite cylinders 40 mm in diameter and 80 mm long. Then, they were dried for 15 - 20 minutes at 100 - 150°C and introduced into the light

Card 1/2

Determination of Phosphorus in Beryllium
Oxide by the Spectrographic Method

S/075/60/015/004/029/030/XX
B020/B064

source (Fig. 1). The cylindrical electrode was forced into a cylindrical motion with an CA-2(SD-2) electromotor. The spectra were recorded with an MCK-22(ISP-22) spectrograph. The light source was a broken a.c. arc of a AГ-1(DG-1) generator with a chopper. The amperage was 14 a, the burning time and the interval of the arc were 0.5 sec each. Standards with a phosphorus content from 0.001 to 0.1% P were obtained by grinding $\text{Ca}_3(\text{PO}_4)_2$ with pure beryllium oxide. Pure beryllium oxide was obtained by annealing $\text{BeCO}_3 \cdot \text{Be}(\text{OH})_2$ at $700 - 800^\circ$ for one hour. 3% Bi_2O_3 was added as a standard sample in each case. The intensity of the lines P_I 2136.2 - Bi_I 2133.6 was measured. The calibration curve was recorded in the coordinates ($\log C; \Delta S$), where C is the phosphorus concentration in the standard samples, and ΔS is the varying degree of blackening (Fig. 2). The accuracy of phosphorus determination in beryllium oxide by the method described is 0.001%; the reproducibility of the results of analysis in the concentration range between 0.005 and 0.1% is $\pm 5 - 6\%$, while at concentrations lower than 0.005% reproducibility decreases to $\pm 10 - 15\%$. There are 2 figures and 3 references: 2 Soviet and 1 US.

SUBMITTED: July 30, 1959
Card 2/2

USTINOV, Mikhail Alekseyevich; MOISEYEV, M.I., red.; BEREZIN, I.A.,
red.; MARAKASOVA, L.P., tekhn. red.

[New developments in collective-farmers' wages] Novoe v oplate
truda kolkhoznikov. Pod red. M.I. Moiseeva. Moskva, Izd-vo
"Sovetskaya Rossiya," 1961. 46 p. (MIRA 15:2)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyay-
stvennykh nauk im. V.I. Lenina (for Moiseyev).
(Collective farms--Income distribution)

BEREZIN, I.A.; ALEKSANDROVICH, K.V.

Determination of sulfur, chlorine, and fluorine in beryllium oxide
by the spectrographic method. Zhur.anal.khim. 16 no.5:613-616
S-O '61. (MIRA 14:9)
(Beryllium oxide) (Sulfur--Spectra) (Halogens--Spectra)

BEREZIN, I.A.

Determination of sulfur and halogens in solutions by the use
of a hollow cathode. Zav.lab. 27 no.7:859-861 '61.
(MIRA 14:7)

(Halogens--Spectra) (Sulfur--Spectra)

BEREZIN, I. A.

Distribution of spectral line intensities in a hollow cathode.
Opt. i spektr. 13 no.6:850-851 D '62. (MIRA 16:1)

(Spectrum analysis) (Cathodes)

BEREZIN, I.A.; MALYSHEV, V.I.

Determination of small amounts of hydrogen and oxygen in
metallic uranium. Zhur. anal. khim. 17 no.9:1101-1104 D '62.
(MIRA 16:2)

(Uranium—Hydrogen content)

(Uranium—Oxygen content)

BEREZIN, I.A.

Determination of the thickness of zinc electroplated coatings by
the anodic solution method. Zav.lab. 28 no.8:956-957 '62.

(MIRA 15:11)

(Zinc--Plating) (Thickness measurement)

TRUNOV, Dmitriy Ivanovich; BEREZIN, I.A., red.; MARAKASOVA, L.P.,
tekhn. red.

[Treasure gorges; four trips through the Northern Caucasus]
Ushchel'ia sokrovishch; 4 puteshestviia po Severnomu Kavkazu.
Moskva, Izd-vo "Sovetskaia Rossia," 1963. 380 p.

(MIRA 16:12)

(Caucasus, Northern--Description and travel)

BEREZIN, I.A.

Spectrographic determination of silver in hyposulfite solutions
with electrolytic sampling. Zav. lab. 29 no.9:1083-1084 '63.
(MIRA 17:1)

S/051/63/014/001/004/031
E039/E120

AUTHORS: Berezin, I.A., and Yanovskaya, G.N.

TITLE: A study of the excitation of iodine in a hollow cathode

PERIODICAL: Optika i spektroskopiya, v.14, no.1, 1963, 23-28

TEXT: The dependence of the intensity of the spectral lines of iodine on the composition of the gas sustaining the discharge, the gas pressure, the current intensity and the presence of an impurity with a lower excitation potential, is investigated. The sensitivity for determining iodine in an atmosphere of neon is one order higher than for argon, while in helium it is two orders higher than for neon (10 mm Hg gas pressure, 250 mA). Standards containing 10% iodine were used with Ar and Ne, and 0.1% iodine with He. The subsequent measurements were carried out in He. At pressures less than 5 mm and more than 20 mm the condition of the discharge in the hollow cathode deteriorated, hence the pressure dependence of the iodine lines was determined over the range 7.5 to 17 mm. As the pressure was increased the intensity of the majority of the lines either decreased or remained constant; only a few increased in intensity, in particular 5338.19 and 5407.36 Å.

Card 1/2

A study of the excitation of iodine...

S/051/63/014/001/004/031
E039/E120

As the current was increased, so did the intensity of all the lines. The majority increased linearly with the current, but for the 5338.19 and 5407.36 Å lines the intensity depended approximately on the square of the current. With increasing concentration of sodium, which has a low excitation potential, the intensity of all the iodine lines decreased uniformly. In addition, the intensities of the spectral lines of iodine, chlorine, bromine and sulphur in a hollow cathode are compared with line intensities for the same elements in a glow discharge. The results are explained on the basis of collision processes. There are 2 figures and 3 tables.

SUBMITTED: November 27, 1961

Card 2/2

UDACHIN, Sergey Aleksandrovich, prof., doktor ekon. nauk; BEREZIN,
I.A., red.

[Land resources of Russia] Zemel'nye bogatstva Rossii. Moskva, Sovetskaja Rossiia, 1963. 409 p. (MIRA 17:6)

OVSYANNIKOV, Nikolay Gavrilovich; BEREZIN, I.A., red.

[Arteries of fertility] Arterii plodorodiia. Moskva,
Sovetskaia Rossiia, 1964. 50 p. (MIRA 18:1)

1. Pervyy zamestitel' predsedatelya Goszemvodkhoza
RSFSR (for Ovsyannikov).

BEREZHNOY, Konstantin Leont'yevich, kand. ist. nauk; OSIPOV,
Mikhail Georgiyevich, zhurnalist; BEREZIN, I.A., red.

[On the rise; story about the "Proletarskaia Volia" Col-
lective Farm in Stavropol Territory] Na vzlete; rasskaz
o kolkhoze "Proletarskaia volia" Stavropol'skogo kraia.
Moskva, Sovetskaia Rossiia, 1964. 124 p. (MIRA 17:8)

BEREZIN, I.A.

Effect of impurities on the excitation of spectra of sulfur
and halogens in a low-voltage spark. Zhur. prikl. spekt. 3
no. 6:498-503 D '65 (MIRA 19:1)

1. Submitted November 29, 1964.

L 35869-66 EWI(d)/EWI(I)/EWP(M)/EWI(M)/EWP(T)/EII/EWP(K)

ACC NR: AP6021218

SOURCE CODE: UR/0294/66/004/003/0419/0423

AUTHOR: Kul'gavchuk, V. M.; Shishkin, Yu. B.; Berezin, I. A. (Moscow)
(Moscow) (Moscow)

ORG: none

TITLE: Measurement of the temperature in the first stage of the electrical explosion of wires

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 3, 1966, 419-423

TOPIC TAGS: silver, copper, constantan, exploding wire, electric inductance, temperature measurement

ABSTRACT: The purpose of the present article is to determine the temperature in the first state of an electrical explosion as a function of the energy input into copper, silver, and constantan wires at different warm-up times. The experimental set-up consisted of a current-pulse condenser oscillator (condenser capacity, 1 μ f; discharge circuit inductance without the inductance wire, 0.058 μ h; and with an additional coil, 1.7 μ h), two UM-2 monochromators with FEU-27 photomultipliers at their outputs, cathode followers, amplifiers (with 0.1- μ sec rise time), and two OK-21 oscillographs, one of which recorded the discharge circuit current and the wire voltage, and the other, the intensity of the continuous spectrum in selected sectors. The oscillator lagged 0.2 μ sec behind the start of the oscillograph sweep. A panel

Card 1/4

UDC: 533.9.082.5

L 35869-66

ACC NR: AP6021218

box with an input slit and a semitransparent mirror was located in front of the monochromators. Table 1 shows the energy input time (the duration of the warm-up current pulse before

Table 1. Energy input time and light pulse duration (discharge voltage = 7kv)

Specimen	Warm-Up Time μsec		Emission time, μsec		Color Temperature at E=1.5E _{subl} , °K	
	L ₁ *	L ₂ *	L ₁	L ₂	L ₁	L ₂
<u>Copper</u> 27	0.35	1.0	0.5	1.2	4600	3900
<u>Silver</u> 27	0.25	0.9	0.4	1.0	3700	2300
<u>Constantan</u> 4	0.50	0.8	0.6	1.0	4200	4200

* L₁ = 0.058 μh, L₂ = 1.7 μh.

the appearance of the current break), and the light pulse duration (the time from the beginning of the leading edge of the pulse up to the extrapolated value of the linear segment of the trailing edge to zero level) at a discharge voltage of 7 kv. The warm-up time of the copper

Cord 2/4

L 35869-66

ACC NR: AP6021218

and the silver wires increases by an order of 3 — 3.5 and that of constantan by an order of 1.6 when the discharge circuit inductance is changed from 0.058 to 1.7 μh . Such warm-up behavior is attributed to the fact that the resistance of the copper and the silver specimens is lower than the internal resistance of the oscillator, whereas the resistance of the constantan wires is greater. The dependence of the color temperature on the energy input is given in Fig. 1. It is shown that during a fast warm-up (0.25 — 0.50 μsec) the temperature rises

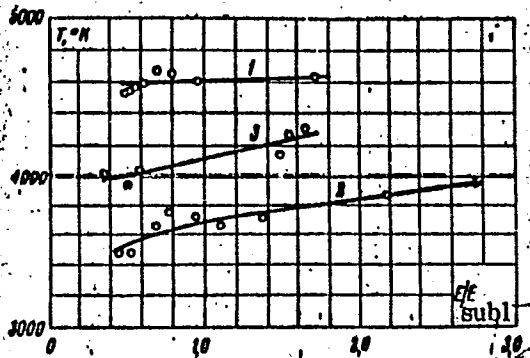


Figure 1. The color temperature of exploding wires at the peak ignition point of emission as a function of energy input.

1, 2, 3 — copper, silver, and constantan wires 0.1, 0.1, and 0.07 mm in diameter, respectively; 1a — L_d (discharge circuit inductance) = 0.058 μh ; l = 11 mm; 1b — L_d = 1.7 μh , l = 44 mm.

Card 3/4

ACC NR: AP6021218

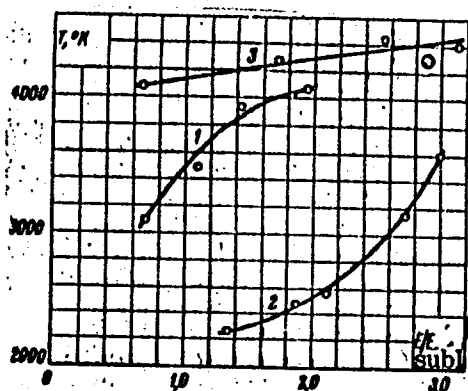


Figure 1. (b)

with an increase in the energy and reaches 4000—4700K when the input energy is equal to 1.7—3 sublimation energy. With an increase in the warm-up time (to 0.8—1 μsec) copper and silver show a faster rise in temperature with rising energy, the absolute values of the temperature, however, are lower than during a faster warm-up. Orig. art. has: 4 figures and 1 table. [26]

SUB CODE: 19,20/

ATD PRESS: 5036

SUBM DATE: 24Feb65/

ORIG REF: 007/

OTH REF: 006/

Cord

4/4 *Mc*

GUSEV, V. D.; MIRKOTAN, S. F.; KIYANOVSKIY, M. P.; BEREZIN, I. B.

"Phase Investigations of the Ionosphere Drifts."

summary to be presented at 13th Gen Assembly, IUGG, Berkeley, Calif, 19-31
Aug 63.

BEREZIN, I. F. PROF

USSR/Medicine - Penicillin
Medicine - Peritonitis

Nov 48

"Use of Penicillin in Treating Peritonitis," Prof
I. F. Berezin, Hon Worker of Sci, Turkmen SSR, Hosp
Surg Clinic, Ashkhabad, 5 pp

"Khirurgiya" No 11

Majority of article is devoted to review of exist-
ing data on subject. Gives two case histories.

18/49T35

BEREZIN, I. F.

28014. BEREZIN, I. F. -- K voprosu o chrezplevral'nykh operatsiyakh po povodu raka pishchevoda. Yubileyny sbornik khirurg. Rabot, posvyashch. Prof. Shilovtsevu. Kuybyshev, 1949, S. 66-77.

SO: Letopis' Zhurnal'nykh Statey. Vol. 37, 1949.

BEREZIN, I.F., prof., zaslushennyy deyatel' nauki Turkmen'skoy SSR.

Seventeenth International Surgical Congress in Mexico. Zdrav.
Turk. 2 no.1:46-49 Ja-F '58. (MIRA 12:6
(MEXICO (CITY)--SURGERY--CONGRESSES)

BEREZIN, I.F., prof., zasluzhennyy deyatel' nauki Turkmenskoy SSR.

Prevention of accidents and the organization of first aid for
trauma. Zdrav.Turk. 2 no.3:3-7 My-Je '58. (MIRA 12:6)
(ACCIDENTS--PREVENTION) (FIRST AID IN ILLNESS AND INJURY)

BEREZIN, I.F., prof.

Planning research problems of institutions of the Tatar A.S.S.R.
Public Health Ministry from 1959 to 1965. Zdrav. Turk. 3 no. 4:3-8
Jl-Ag '59. (MIRA 13:2)

1. Predsedatel' Uchenogo soveta Minzdrava TSSR.
(TATAR A.S.S.R.--PUBLIC HEALTH)

BEREZIN, I.F., prof.

Results of the First Turkmen Traumatological Conference. Zdrav.
Tark. 5 no.6:34-42 N-D '61. (MIRA 15:2)

1. Chlen-korrespondent AMN SSSR.
(TRAUMATOLOGY---CONGRESSES)

SEDOV, K.R., kand.med.nauk; UTKIN, G.I., kand.med.nauk; ~~BEREZIN, I.M.~~

Characteristics of accidents in the construction of the Kuybyshev
Hydroelectric Power Station. Ortop.travm. i protez. 20 no.3:60-
61 Nr '59. (MIRA 12:6)

1. Iz khirurgicheskogo otdeleniya (nach. - kand.med.nauk
G.I.Utkin) Portovoy bol'nitsy "Kuybyshevgidrostroya" (nach. -
kand.med.nauk K.R.Sedov).

(ACCIDENTS, INDUSTRIAL

in construction of hydroelectric station
(Rus))

SEDov, K.R., kand.med.nauk; UTKIN, G.I., kand.med.nauk; BEREZIN, I.M.

Organization of medical and hygiene care at the construction site
of Kuibyshev. Sov. zdav. 19 no.3:29-30 '60. (MIRA 14:6)

1. Iz portovoy bol'nitsy "Kuybyshevgidrostroya" (nachal'nik -
kandidat meditsinskikh nauk K.R.Sedov).
(VOLGA HYDROELECTRIC POWER STATIONS—HYGIENIC ASPECTS)

BEREZIN, I.M.; RAGIMOVA, A.M. (Moskva)

Esterification process in the liquid phase oxidation of octadecane.
Zhur. fiz. khim. 35 no. 4:842-847 Ap '61. (MIRA 14:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Octadecane) (Esterification) (Oxidation)

BEREZIN, I.M.

Case of simultaneous perforation by an ulcer of the stomach and duodenum. Sov.med. 26 no.7:134-135 J1 '62. (MIRA 15:11)

1. Iz khirurgicheskogo otdeleniya (zav. Yu.S.Fedorov) Portovoy bol'nitsy Stavropolya-na-Volge.
(PEPTIC ULCER)

FEDOROV, Yu.S., BEREZIN, I.M.

Spontaneous ruptures of the spleen. Khirurgiia 39 no.10:
81-84 0 '63. (MIRA 17:9)

1. Iz khirurgicheskogo otdeleniya (zav. Yu.S. Fedorov) Portovoy
bol'nitsy (glavnyy vrach V.A. Sukhodol'skaya) Stavropolya-na-
Volge.

BEREZIN, I. P.

BEREZIN, I. P. - "The Combination of Weak Solutions of Novocaine,
Dicaine, and Soveaine ('Tricaine') for Infiltration Anesthesia."
Sub 14 Jan 52, First Moscow Order of Lenin Medical Inst.
(Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

NOL', Ya.A. [deceased]; PRUNIS, N.M.; BEREZIN, I.P., kand.med.nauk;
LITVINOV, L.D.

Rare case of reticulosarcoma of the stomach. Nov.khir.arkh.
no.11:84-85 '61. (MIRA 14:12)

1. Khirurgicheskoye otdeleniye Moskovskoy gorodskoy bol'nitsy
No.53.
(STOMACH-TUMORS) (RETICULO-ENDOTHELIAL SYSTEM-TUMORS)

BEREZIN, I. P. (Moskva, K-9, Stolesnikov per., 5, kv. 36);
GOLOSOVSKAYA, M. A. (Moskva, Leninskiy pr., 7, kv. 20)

Cystoadenoma of the pancreas. Vop. onk. 6 no.12:57-59 '60.
(MIRA 15:7)

1. Iz khirurgicheskogo otdeleniya (vedushchiy khirurg - prof.
D. E. Odinov), patologoanatomicheskogo otdeleniya (zav. otdeleniyem -
prof. I. A. Kusevitskiy) 53-y Moskovskoy gorodskoy bol'nitsy
(glavnyy vrach - S. G. Rynkevich).

(PANCREAS--TUMORS)

BEREZIN, I.P.

Concentration of antibiotics in the blood and bile of cholecystitis patients. Antibiotiki 8 no.2:175-179 F'63. (MIRA 16:7)

1. Khirurgicheskoye otdeleniye (vedushchiy khirurg - prof. D.E. Odinov) i klinicheskaya laboratoriya (zav. M.E.Chaban) 53-y gorodskoy bol'nitsy (glavnyy vrach S.G. Rynkevich) Moskvyy.
(GALLBLADDER—DISEASES) (ANTIBIOTICS)

ANAN'YEV, M.G. (Moskva A-55, Novoslobodskaya ul., d.57/65, kv.18);
BEREZIN, I.P.

Operating room with high atmospheric pressure; a survey of
the literature. Grud. khir. 6 no.6:93-98 N-D '64.

(MIRA 18:7)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury in instrumentov (direktor: M.G. Anan'yev),
Moskva.

ANAN'YEV, M.G.; BEREZIN, I.P.; SHCHUPAKOV, N.N.; KOPYLOV, V.I.

Surgery performed in an operating room under increased atmospheric pressure. Eksper. khir. i anest. 9 no.3:14-18 My-Je '64.

(MIRA 18:3)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. M.G. Anan'yev) i Vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut okhrany truda (dir. M.Ye. TSutskov) Vsesoyuznogo tsentral'nogo soveta professionalnykh soyuzov, Moskva.

BEREZIN, I.P.; EPSHTEYN, I.M.; KASHCHEVSKAYA, L.A.

Use a pair of gold and iron electrodes in electrochemical registration of the oxygen regime in tissues in vivo. Eksper. khir. i anest. 9 no.3:18-19 My-Je '64. (MIRA 18:3)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. M.G. Anan'yev) i Onkologicheskiiy institut imeni Gertsena (dir. - prof. A.N. Novikova), Moskva.

ACC NR: AT6036498

SOURCE CODE: UR/0000/66/000/000/0065/0066

AUTHOR: Berezin, I. P.; Seregin, G. I.; Rostovtsev, B. N.

20

ORG: none

TITLE: Experimental evidence of the establishment of an oxygen reserve during oxygenation of tissues under high pressure [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 65-66

TOPIC TAGS: hyperoxia, oxygen excess pressure, electroencephalography, animal physiology, tissue oxygen saturation

ABSTRACT: Because existing procedures for theoretical computation of the oxygen reserves created in the organism by excess pressure oxygen breathing are difficult and sometimes imprecise, studies were conducted to determine experimentally the degree of oxygen reserves created in the animal organism under various definite conditions. The duration of continued EEG activity in the brain of rabbits after the cessation of respiration was used as an index of the oxygen reserve. Altogether, 7 series of experiments were conducted on 70 rabbits in an experimental pressurized operating room: the first 4 series studied the duration of continued brain bioelectric activity

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after cut-off of oxygen breathed for 30 min at pressures of 1, 2, 3, and 3.6 at.

The 5th series was conducted at 3 at, but with CO₂ removed from the respiratory tract after external respiration with oxygen was cut off; the 6th series was designed to show the effect of CO₂ on tissue O₂ saturation at 3 at, and the 7th series studied the persistence of brain bioelectric activity when circulation and respiration cease simultaneously.

It was found that brain bioelectric activity in rabbits always persists considerably longer under conditions of pressure oxygen breathing than at normal pressure, and that up to a certain point the persistence of EEG activity increases with increased atmospheric pressures.

The experimental data obtained show that respiration of atmospheres with elevated pO₂ creates considerable oxygen reserves in the tissues, which may serve both therapeutic as well as other medical and biological purposes. [W.A. No. 22; ATD Report 66-116]

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Card 2/2 egk

ACC NR: AP6031639 (A) SOURCE CODE: UR/0240/00/000/000

AUTHOR: Popov, T. A.; Epshteyn, L. M.; Berezin, I. P.

ORG: Institute of General and Municipal Hygiene im. A. N. Sytin, AMN SSSR
(Institut obshchey i kommunal'noy gigiyony AMN SSSR); State Institute of Oncology
im. I. A. Gertsen (Gosudarstvennyy onkologicheskiy institut); Institute of Experi-
mental and Surgical Apparatus and Instruments, Moscow (Institut eksperimental'noy
i khirurgicheskoy apparatury i instrumentov)

TITLE: Electroanalytic method of studying the speed of oxygen consumption in
tissues in vivo in a sanitary-toxicological experiment

SOURCE: Gigiyena i sanitariya, no. 9, 1966, 67-71

TOPIC TAGS: electroanalysis, oxygen consumption, rat, histology, toxicology

ABSTRACT:

The electroanalytic method of studying pO_2 in the tissues of
a living organism has been proven to be a sensitive test
affiliated with the determination of the MPC (maximum per-
missible concentration) of a series of tissues. Experiments
were conducted with white rats: in one group, a water solution
of 2,4 dinitrophenol (DNPH) with a concentration of $1/2 LD_{50}$
(1.5 mg/kg) was injected in the course of 80 days; in the
second group the same dosage of DNPH was injected once; the
third group was the control and received no injection. A
specially constructed organic glass chamber which supplied
100% oxygen at a rate of 5 l/min, thus allowing a full ex-
change of the air with respired CO_2 , was used. An electronic
self-recording potentiometer (YePP09) studied the oxygenic

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condition in the tissues. The following coefficients were used to analyze the results: K_1 represented the relationship of the maximal force of the current to the original force and also the degree of disturbance of the tissue after oxygenic stress. K_2 , K_3 , and K_4 represented the relation of the current forces at 60, 120, and 180 seconds after the first supply of oxygen. Analysis of the data showed that a single inoculation of DNPH produces a significant reduction in the saturation of oxygen in muscles, and increases oxygen consumption. In addition, a more severe experiment was conducted by applying arterial gaskets to the limbs and then inoculating DNPH. Analysis of this method also showed that a single inoculation of DNPH produces a significant increase (43%) in O_2 consumption. It was concluded that the electroanalytic method permits correlation of respiratory intensity in intact muscles of living organisms and expression of respiratory kinetics by a constant of reaction speed. This method of registering O_2 consumption in living tissues can also be used in tracing the effect of a small dose of DNPH over a long period of time. (WA-50; CBE No. 12)

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Card 2/2

PANASEVICH, M.A.; BEREZIN, I.P., kand. med. nauk

Case report on extrauterine pregnancy. Akush. i gin. 39 no.3:
132 My-Je'63 (MIRA 17:2)

1. Iz ginekologicheskogo otdeleniya (zav. M.A. Panasevich)
58-y gorodskoy bol'nitsy (glavnyy vrach S.G. Rynkevich) Moskvyy.